CLAIM AMENDMENTS:

Claim 1 (Cancelled).

Claim 2 (Currently Amended): A method of water analysis in a semiconductor manufacturing process for detecting a presence of microorganisms in a water sample, comprising:

providing a membrane as a filter;

filtering out the microorganisms in the water sample, using the membrane;

growing the microorganisms on the membrane with a nutrient solution;

staining the microorganisms on the membrane with potassium permanganate ($KMnO_4$);

rinsing the membrane with purified deionized water; and

performing a colony count for the microorganisms on the membrane.

Claim 3 (Previously Amended): The method of water analysis according to claim 2, wherein a pore size of the membrane is about 0.3 μm in diameter.

Claim 4 (Previously Amended): The method of water analysis according to claim 2, wherein the water sample is filtered through the membrane by a vacuum filtration technique.

Claim 5 (Previously Amended): The method of water analysis according to claim 2, wherein the microorganisms are cultivated on the membrane at about 30°C, using 2 ml of nutrient solution.

Claim 6 (Original): The method of water analysis according to claim 2, wherein the concentration of KMnO4 is about 0.02M (mole per liter).

Claim 7 (Previously Amended): The method of water analysis according to claim 2, wherein after the microorganisms on the membrane are stained with $KMnO_4$ for about 10 to 30 seconds, the membrane is rinsed with purified deionized water.

Claim 8 (Currently Amended): A method of water analysis in semiconductor manufacturing process for separately detecting a presence of microorganisms in a plurality of water samples, comprising:

providing a plurality of membranes as filters;

filtering out the microorganisms in each of the water samples, using a corresponding one of the membranes, separately;

growing the microorganisms on different membranes with a nutrient solution for different times;

staining the microorganisms on each of the membranes with potassium permanganate ($KMnO_4$);

rinsing each of the membranes with purified deionized water; and

performing a colony count for the microorganisms on each of the membranes.

Claim 9 (Previously Amended): The method of water analysis according to claim 8, wherein a pore size of the membrane is about 0.3 μm in diameter.

Claim 10 (Previously Amended): The method of water analysis according to claim 8, wherein each of the water samples is filtered through a corresponding membrane by a vacuum filtration technique.

Claim 11 (Previously Amended): The method of water analysis according to claim 8, wherein the microorganisms are cultivated on each of the membranes at about 30°C, using 2 ml of nutrient solution.

Claim 12 (Previously Amended): The method of water analysis according to claim 8, wherein the microorganisms on each of the membranes are cultivated for 24, 48, 72, and 96 hours, respectively.

Claim 13 (Original): The method of water analysis according to claim 8, wherein the concentration of $KMnO_4$ is about 0.02 M (mole per liter).

Claim 14 (Previously amended): The method of water analysis according to claim 8, wherein the microorganisms on each of the membranes are stained with $KMnO_4$ for about 10 to 30 seconds.